

The "Plane" Truth About DoD Undergraduate Helicopter Pilot Training Consolidation

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Subject Area - Training

EXECUTIVE SUMMARY

Title: The "Plane" Truth About DoD Undergraduate Helicopter Pilot Training Consolidation

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Thesis: The Department of Defense (DoD) could save approximately a billion American tax dollars by consolidating all DoD Undergraduate Helicopter Pilot Training.

Discussion: The DoD operates two separate Undergraduate Helicopter Pilot Training (UHPT) programs: the Army Initial Entry Rotary Wing course at Fort Rucker, Alabama and the Navy UHPT program at Whiting Field, Florida. Since 1965 proposals have been made to consolidate the two programs in order to eliminate redundancy and increase DoD efficiency. For years, congress has reviewed the proposals and has voted against consolidation primarily due to the differences in the training requirements of the Army and the Navy. The primary difference in the programs is the Navy requirement to train all Navy/Marine pilots in fixed-wing aircraft prior to training in helicopters. Nearly twenty major independent studies have been conducted by the Services themselves, the DoD Inspector General, the Interservice Training Review Organization, the Government Accounting Office, and the Commission on Roles and Missions to evaluate the potential and feasibility of consolidating UHPT. With only a few exceptions, the studies and reports concluded that the Navy should discontinue training helicopter pilots in fixed-wing aircraft and supported consolidation of all UHPT. Congress has continued to vote against consolidation. This year, the DoD let a \$7 billion contract to build 711 new fixed-wing training aircraft for the Air Force and the Navy: the Joint Primary Aircraft Training System (JPATS). The Navy is scheduled to receive 339 JPATS of which approximately 97 will be used to train helicopter pilots. The cost of the 97 aircraft is \$955 million. At the same time, the Army, which operates approximately 80% of the DoD helicopter fleet, reports that its Aviation Center at Fort Rucker is operating at approximately 70% training capacity and is capable of handling all DoD UHPT now. Additionally, the Army Aviation Center excess training capacity will continue to grow as pilot training requirements decrease.

Recommendation: The DoD should reduce spending and inefficiency by reducing the JPATS purchase by the number of aircraft required to train helicopter student pilots, discontinue fixed-wing training for Navy/USMC helicopter student pilots, and consolidate all DoD UHPT at the Army Aviation Center at Fort Rucker, Alabama.

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THE "PLANE" TRUTH ABOUT DOD UNDERGRADUATE HELICOPTER

PILOT TRAINING CONSOLIDATION

I. SHOULD UNDERGRADUATE HELICOPTER PILOT TRAINING BE CONSOLIDATED?

Fiscal realities are forcing our government to relook the way we conduct business and it has become apparent that very few institutions are sacred. In the past couple of years this fact has shaken up the Department of Defense (DoD). The government has pursued many ways to create greater efficiencies in the DoD, and one method has been through the Base Realignment and Closure (BRAC) commission. The commission's mission has been to identify inefficiencies and potential for savings by closing and consolidating bases and posts around the globe. The reason for the existence of the BRAC commission and other methods of improving efficiency in the DoD is due to the decreasing defense budget, the shrinking DoD, and the ever growing national debt. By closing and realigning military installations world-wide, we could potentially save millions in the near term and billions over the out years. But the BRAC process is only one of the methods that the government is using to create greater efficiencies; the Secretary of Defense's recent Bottom Up Review and the Commission on Roles and Missions (CORM) seek greater efficiency in government. Currently, the Joint Staff is conducting a comprehensive review of roles, missions, and functions of the Services to reduce unnecessary duplication in effort to produce maximum efficiency per dollar spent on defense.

A prime example of redundancy in the DoD is undergraduate fixed wing pilot training for the Air Force and Navy/USMC. Each service has operated its own undergraduate flight training program, typically with different aircraft. Currently, the Air Force and the Navy are making strides to make the training process more "joint" by procuring a common Joint Primary Aircraft Training System (JPATS) that will be used to train both Air Force and Navy pilots.

Another example of redundant training is the separate undergraduate helicopter pilot training (UHPT) programs operated by the Army and the Navy. Potential exists for major tax dollar savings by reducing the redundancy in the DoD training. This paper will answer the question: "should all DoD UHPT be consolidated and if so, where should the new UHPT be conducted?"

Currently, American tax payers fund two separate UHPT programs in the DoD: the Army Initial Entry Rotary Wing (IERW) Course at the Army Aviation Center, Fort Rucker, Alabama, and the Navy UHPT program conducted at Whiting Field, Florida. The Army conducts all training for Army and Air Force helicopter pilots. The Navy conducts training for Navy, Marine Corps, and Coast Guard helicopter pilots.

DoD force structure reductions have reduced the combined services UHPT requirements. In FY 1989, the Army graduated 2,156 Army, Air Force, and international students from its UHPT program at Fort Rucker.¹ In 1991, the Army UHPT graduated 1551 students, and in 1994 the number decreased to 1203.² Similarly, the Navy UHPT program graduated approximately 550 Helicopter pilots in the same year. This year the Navy proposes to train approximately 564 undergraduate pilots (Navy, Marine, Coast Guard) and the Army proposes to train approximately 1330 pilots.³ The Army Aviation Center at Fort Rucker has a capacity to train 1700 to 1900 undergraduate students annually, although during the Vietnam era the Army Aviation Center produced 2,400 graduates per year.⁴ In light of the training capacity and reduced student numbers, the

Army Aviation Center has announced that it can accommodate all future DoD UHPT requirements. The Army contends that considerable cost savings can be realized by consolidation of UHPT through infrastructure reduction, utilization of common training equipment, and implementation of standardized training.

The American public deserves the maximum efficiency in the DoD and military officials and politicians are presently seeking ways to improve the way the government operates. The proposal to consolidate UHPT could prove beneficial to the Services and the American taxpayer. This paper will review the history behind UHPT consolidation and will outline the issues involved with consolidation. It will discuss the pros and cons and future implications of consolidation. Finally, it will propose consolidation of UHPT at the Army Aviation Center.

II. PAROCHIALISM AND POLITICS

Consolidation of UHPT is not a new concept; the issue has been proposed and studied since the 1960's. Besides the Services themselves, the DoD Inspector General (DoDIG), the Interservice Training Review Organization (ITRO), and the Government Accounting Office (GAO) have all conducted their own independent research studies to evaluate the potential and feasibility of consolidating UHPT.⁵ With only a few exceptions, all reports and audits concluded that it was feasible and cost-effective to consolidate all DoD UHPT programs at the Army Aviation Center at Fort Rucker.⁶ As a result of the 1970 review, the Air Force transferred its UHPT program to Fort Rucker.

There have been two primary reasons that have prevented consolidation. The first is related to the differences between the curriculums of the Navy and Army UHPT programs. Specifically, the Army UHPT consists of only helicopter training, but the

Navy's curriculum requires fixed wing training for helicopter pilots prior to receiving UHPT. The second reason is porkbarrel politics. The President's budgets for the Fiscal Years (FY) 1977 through 1980 proposed consolidating all helicopter training at Fort Rucker. However, despite testimonial endorsement by the Secretary of the Navy, the Chief of Naval Operations, and the Commandant of the Marine Corps supporting consolidation of UHPT at Fort Rucker, Congress continually voted against the budget proposals and directed continuation of the separate Army and Navy programs.⁷ The influence of politics on the consolidation issue cannot be understated. Both Alabama and Florida Congressional Senators and Representatives realize the potential adverse economic impact if UHPT were to leave their state or district. Consequently, regardless of what would be best for the whole, votes and deals have been cast to protect and maintain the status quo.

III. DECADES OF POLITICAL QUAGMIRE

The DoD first considered consolidating UHPT in 1965. GAO recommended that fixed wing training for Navy and Marine helicopter pilots be discontinued. Five years later, the House Appropriations Committee asked the Air Force and Navy to consider having the Army conduct all training for DoD helicopter pilots.⁸ Additionally, the committee directed the Air Force and the Navy to discontinue fixed-wing training of helicopter pilots.⁹

Consequently, in October 1970, the Air Force began sending their potential helicopter pilots to the Army's UHPT program. However, the Navy considered fixed wing training a critical part of the training process for students, and, therefore, the Navy did not start training at Fort Rucker. The Navy used fixed wing training in their primary phase of training, for all flight students and used the training results in the screening and selection

process for follow-on training. However, during that period, the Army trained 492 Marine helicopter pilots due to the Vietnam War pilot requirement.¹⁰ Also, the Navy stated that additional helicopters were required if an all helicopter pilot training program were to be initiated and that funds were not available to make such a purchase. Again, in February 1971, a Defense staff study recommended that the Navy UHPT program be discontinued and that the Army perform all training for the DoD. Again, the Navy objected to the consolidation of UHPT for the same reasons.¹¹

In August 1972 the Interservice Training Review Organization (ITRO) was established by agreement of the Deputy Chief of Staff Personnel, USA; Director, Naval Education and Training, USN; Assistant Chief of Staff, G-3, USMC; and Deputy Chief of Staff, Personnel, USAF. The purpose of ITRO was to review Service training programs and recommend ways of reducing cost and duplication. ITRO would conduct several audits and studies on the UHPT concept.

In May 1974, the GAO conducted a study: *Need To Assess Potential For Consolidating Undergraduate Helicopter Pilot Training, Department of Defense*. GAO evaluated the potential for consolidation of UHPT in the DoD and concluded that the cost of undergraduate training could be reduced by requiring that the Navy discontinue fixed-wing training and consolidate all helicopter training at a single site. GAO recommended that the Secretary of Defense consider directing the Navy to discontinue fixed-wing training and move toward consolidating undergraduate training at one site under a joint all helicopter program.

However, in December 1974, after the results of the May 1974 GAO report results were released, OP-59 (Aviation Manpower and Training Office of the Deputy Chief of Naval Operations) requested an opinion from the Judge Advocate General regarding consolidation of UHPT. Specifically, OP-59 wanted to know if consolidation would require an amendment of section 5012(b) of Title 10, United States Code (composition

and functions of the Navy taken from the National Security Act of 1947). The Judge Advocate responded: "since the training of naval aviation personnel is a function assigned to the Department of the Navy under 10 U.S.C. 5012, it would appear that, if the Secretary of Defense were to propose that consolidation of the undergraduate pilot training programs of the military Services, a report setting forth that proposal would have to be made to the Senate and House committees."¹² The Judge Advocate's response stated that UHPT consolidation would require approval by both Houses in the Congress.

Then in 1975 the Office of the Secretary of Defense requested that ITRO conduct a study of UHPT consolidation. The ITRO study concluded that "significant commonality existed between the Army and Navy UHPT programs", and that significant savings would result from consolidation. However, the senior ITRO board representative did not provide any formal recommendations.¹³

At this time the DoD proposed to consolidate all UHPT at Fort Rucker and to close one Navy training base and the proposal was incorporated in the FY-77 President's budget. However, due to 1974 Judge Advocate's ruling on the legality of Title 10, United States Code, the proposal went before Congress. It was accepted by the House by a margin of 288 to 110, but was rejected by the Senate by a margin of 28 to 61. The House Appropriations Committee requested another study of the proposal.

Program Budget Decision 317 directed the consolidation of UHPT at Fort Rucker beginning in FY 1977. The House Armed Services Committee recommended separate UHPT programs, but the House overturned the committee by approving the consolidation proposal by floor vote. However, the Senate Armed Services Committee disagreed with consolidation and the Senate backed them by rejecting the proposal.

In response to the increasing call from GAO and ITRO to consolidate UHPT, in January 1977, the Navy formed a studies group to evaluate the feasibility of joint training at Fort Rucker. The studies group consisted of both Navy and USMC officers. The team

visited both the Army Aviation Center at Fort Rucker and the Naval Air Training Command at Pensacola to become familiar with each UHPT program. The studies group determined that fixed-wing training was not required to produce a well qualified helicopter pilot.¹⁴ Consequently, the Secretary of the Navy, Graham Clayton, stated "we in the Department of the Navy support the proposal to consolidate helicopter training with the Army at Fort Rucker."¹⁵

Also in January 1977, the DoD released another study: *Report of the Department of Defense of Undergraduate Helicopter Pilot Training Consolidation, April 1977*. This report was in response to the initial congressional request to study the feasibility of consolidating DoD UHPT. Once again, the report recommended that all DoD UHPT be consolidated into an all rotary-wing program to be conducted by the Army at Fort Rucker. DoD estimated that cost avoidance of \$104 million for FY's 1978 through 1982 could be obtained through consolidation.¹⁶ Also, in May 1977, the GAO wrote a letter report to the Chairman of the House Appropriations Committee validating the savings calculations in the April DoD report. Again, the proposal went to vote in Congress with similar results; the House recommended consolidation, but the Senate rejected it. By July 1977, the proposal to consolidate UHPT, recommended by DoD, GAO, and ITRO, had gone to vote three times in Congress and failed each time.

In March 1978, the Defense Audit Service completed another study: *Report on the Review of Projected Savings from Consolidation of Helicopter Training*. The auditors evaluated and reconciled the differences between the Army and the Navy projected savings from consolidation of UHPT as proposed in the April 1977 DoD report. The auditors concluded that potential net savings of \$80 million to \$124 million were possible for FY 1979 through 1983 from UHPT consolidation.¹⁷ In December 1978, the Secretary of the Navy announced that the Navy would consolidate UHPT at Fort Rucker.

The FY 1980 President's budget to Congress proposed the consolidation of UHPT at Fort Rucker. In May 1979 the Commanding General of the Army Aviation Center and the Chief of Naval Air Training formulated a Joint Undergraduate Helicopter Pilot Training Consolidation Plan. The plan called for the Navy to end UHPT at Whiting Field and for all Naval student pilots to begin training at Fort Rucker in January 1980.¹⁸ Also, in September of 1979 the GAO completed another report: *Undergraduate Helicopter Pilot Training: Consolidation Could Yield Significant Savings*. GAO evaluated the DoD, the Department of the Army, and the Department of the Navy savings calculations included in the previous report submitted by GAO two years earlier: *Report of the Department of Defense Study of Undergraduate Helicopter Pilot Training Consolidation at the Army Aviation Center, Fort Rucker, Alabama*. GAO concluded that significant savings would be possible from a consolidation of UHPT. Cost avoidance was estimated at \$63.3 million for FY's 1980 through 1984. However, in September and November 1979, the House and Senate voted against consolidation again.

The next year the DoD proposed maintaining the two UHPT programs but did not authorize the Navy funds for the procurement of new aircraft to support helicopter training. Also, the DoD directed that overflow Navy/USMC students be trained by the Army at Fort Rucker. Once again, Congress disagreed with the proposal and authorized the funds to procure additional TH-57 training helicopters and T-34C training fixed-wing aircraft in order for the Navy to continue training all students at Whiting Field.

In general, up to this point in 1980, the DoD tended to favor both consolidating UHPT at Fort Rucker and discontinuing training Navy and USMC helicopter pilots in fixed-wing aircraft. Though the DoD wanted to consolidate, their proposal was repeatedly defeated by vote in Congress. However, in 1983, Senator Barry Goldwater requested that the Secretary of Defense re-evaluate consolidating UHPT. In response, the GAO conducted yet another examination of the proposal. But this time the auditors

concluded that consolidation would not be cost effective because physical plant expansion would be required at Fort Rucker. GAO briefed the Senate Armed Services Committee on its conclusions in February 1985. However, in 1986, the Goldwater-Nicholas Department of Defense Reorganization Act mandated that the military initiate efforts and means to facilitate joint training. The Goldwater-Nicholas Department of Defense Reorganization Act gave a high level endorsement for the UHPT consolidation proposal. In response, the Senate requested the Secretary of the Navy report on the suitability of the Army UHPT program to train Navy helicopter pilots.¹⁹ This time the Navy responded that the Army program was not suitable for Navy student pilots.

In November 1990 the Deputy Secretary of Defense's Defense Management Report Decision No. 962 (DMRD 962) was published. It proposed consolidating initial helicopter training for all Services at the Army Aviation Center at Fort Rucker. It required termination of all rotor-wing training operations at Whiting Field and it noted that consolidation would preclude the need for fixed-wing training.²⁰ DMRD 962 argued that these actions would eliminate duplication of effort, enhance cooperation among the Services in conducting helicopter operations, and alleviate airspace congestion at Whiting Field. In terms of resources, DMRD 962 estimated monetary savings to be \$22-45 million annually, including a net reduction of 155-166 manpower spaces.²¹ The DMRD recommended that its proposed actions be implemented during the next budget cycle -- in other words, as soon as possible. The Deputy Secretary of Defense approved the DMRD 962 report and requested the Assistant Secretary of Defense for Forces Management and Personnel [ASD (FM&P)] and the Service Secretaries study the possibilities of implementing the recommendation to consolidate UHPT and to complete the report by February 1991.

	<u>FY 92</u>	<u>FY93</u>	<u>FY94</u>	<u>FY 95</u>	<u>FY96</u>	<u>FY-97</u>
Army						
FitOps	26.7	26.4	21.4	16.4	16.4	16.7
MPA	2.8	2.3	2.4	2.5	2.6	2.6
Navy/MC						
FitOps	-2.9	-2.1	-3.2	-3.4	-3.3	-3.3
Maint	-32.9	-32.6	33.4	-35.6	-34.4	-33.6
Other O&M	-9.3	-9.6	-9.4	-9.7	-9.1	-9
MPN	-6.8	-14	-14.5	-15	-15.5	-16
NET TOTAL	-22.4	-29.6	-36.7	-44.8	-43.3	-42.6
MANPOWER						
Army	63	52	52	52	52	52
Navy/MC	-109	-218	-218	-218	-218	-218

DMRD 962 savings estimate (\$ in millions), November 1990.

In 1991 the Army took a major step that still has a major impact on the consolidation issue today: it released a Request for Proposal to buy an off the shelf New Training Helicopter (NTH). The NTH was planned to replace the venerable, yet expensive to operate UH-1 "Huey" as the primary phase training aircraft of the Army UHPT program. A primary requirement of the NTH was that it had to be inexpensive to operate and maintain. The Army planned on purchasing approximately 200 of the NTHs.

Also in 1991, at the request of the Department of the Navy, ITRO conducted another study on the potential for interservice training of UHPT. The ITRO task group members were two representatives from the Navy, a Navy Captain (O-6) and a civilian, an Army Major (O-4) and a civilian and one Air Force Major(O-4). The ITRO study considered two options:

Option 1 -- a jointly developed all Service common core UHPT curriculum followed by Service unique tracks conducted at Fort Rucker (USN/USMC students would not receive fixed-wing training)

Option 2 -- a modified USN/USMC fixed wing course conducted at NAS Whiting Field followed by a jointly developed all

Service common core UHPT curriculum and Service unique tracks conducted at Fort Rucker.

The objectives were to identify manpower changes for Fort Rucker and Whiting Field, identify required facility modifications, and identify total budget changes affiliated with the two options. The categories that the ITRO group studied were personnel, material and services, equipment, facilities, and travel. Each category was studied from the impact on both Fort Rucker and Whiting Field. The findings revealed that Options 1 (consolidation with no fixed-wing training) would cost \$18.7 million for a one time cost and \$35.9 million for an annual recurring cost and Option 2 showed a one time cost of \$18.1 million and a recurring cost of \$55.3 million.²² The conclusion of the ITRO report was that it was not economically feasible to consolidate the Navy and Army UHPT programs under either of the two options.²³ After the study, the Fort Rucker Director of Plans, Training, Mobilization, and Security stated that the finding did not adequately represent the actual projected fiscal impact because the ITRO task group limited the study to UH-1 based training and did not address the NTH and therefore the estimates for both options were unnecessarily high.²⁴

	Option 1	Option 1	Option 2	Option 2
	<u>One-Time</u>	<u>An. Recurring</u>	<u>One-Time</u>	<u>An.Recurring</u>
Personnel	0	-3072	0	3673
Materials	0	7420	0	77624
Equipment	3600	33833	3600	36840
Facilities	7330	0	7330	0
Travel	4131	802	3600	372
Student Pay	0	-3067	0	6748
Other	3618	17	3618	16
TOTAL	\$18,679	\$35,933	\$18,148	\$55,275

ITRO Study results, September 1991 (\$ in 000).²⁵

The next significant study of UHPT consolidation was conducted in March 1992 by the Department of Defense Inspector General (DoDIG). The issue of consolidation was only part of the larger Audit Report issued by the DoDIG with the title *Acquisition of Common Aircraft for Navy and Air Force Undergraduate Pilot Training*. In 1989 the Under Secretary of Defense for Acquisition approved the DOD's Trainer Aircraft Masterplan (Masterplan) which was a planning document for the procurement of Navy and Air Force training aircraft through FY 2015. Decisions affecting delivery of over 2,200 trainer aircraft, with potential acquisition costs of over \$17 billion, could result from the procurement strategy outlined in the Masterplan. The purpose of the DoDIG Audit Report was to determine whether the programs contained in the Masterplan would enhance the quality and adequacy of Navy and Air Force pilots, overcome existing and anticipated training deficiencies, improve training effectiveness, modernize aging trainer aircraft fleets, and minimize acquisition and operation costs. In this context, the auditors were compelled to study the requirement for fixed-wing training for Navy/USMC helicopter pilots and the consolidation of all DoD UHPT.

The audit determined that fixed-wing training for Navy/USMC helicopter pilots was not necessary. "The Navy requirement that helicopter pilots receive fixed-wing training before they receive UHPT is neither cost-effective nor an efficient use of training time. Eliminating the fixed-wing training requirement would enable the Navy to reduce UHPT costs by \$300 million over the Future Years Defense Program (6 years), avoid onetime aircraft replacement costs of about \$700 million, and reduce the length of the UHPT program by about 27 weeks."²⁶

The \$700 million saving was the result of the original effort to identify a common training aircraft for the Navy and the Air Force. The Masterplan identified opportunities for the Joint Primary Aircraft Training System (JPATS) to replace the aging Navy T-34C fleet (used for primary training) and the Air Force T-37 fleet. The significance of the

elimination of Navy/USMC fixed-wing training and UHPT consolidation meant that the DoD could reduce the projected JPATS buy by 140 aircraft at \$5 million per airframe or \$700 million.²⁷

	<u>Planned Delivery Date</u>	<u>Navy</u>	<u>Air Force</u>	<u>Total</u>	<u>Cost</u>
JPATS	FY's 1997-2009	350	538	888	\$4.44 Billion

JPATS procurement figures, DoDIG Audit Report, March 1992.

The DoDIG conducted its research of the UHPT issue partially based on the DMRD 962 report results. The Audit report revealed that resources dedicated to UHPT pilots were not being used effectively because the DoD ran two separate UHPT programs with separate facilities. The audit cost comparison showed that the Navy spent \$24,000 more per student for UHPT than the Army. The Audit Report recommended that all UHPT be consolidated at Fort Rucker which would result in saving of as much as \$79 million (550 annual Navy/USMC students X \$24,000 X 6 years) over the Future Years Defense Program.

Senator Sam Nunn, the Chairman of the Senate Armed Services Committee, delivered a speech to Congress in July 1992 that addressed the redundancy of military training and the potential to save billions of dollars. In his speech he addressed the duplication of military helicopter pilot training: "Both the Army and the Navy operate major helicopter training centers. While there is some justification for separate training activities for more advanced training techniques (such as helicopter landings at seas, nighttime assaults, and so forth) is there any reason for separate facilities for basic helicopter flight training? The Defense Department proposed to do this over ten years ago and Congress blocked it. But the question again needs to be raised. Could basic helicopter flight training be assigned to one of the Services?"²⁸ Senator Nunn's speech on

the Services roles and missions triggered a major study by the Chairman of the Joint Chiefs of Staff (CJCS) to review redundancy and duplication among the services.

In the meantime, in December 1992, the ASD (FM&P) wrote a letter to the Deputy Secretary of Defense relating to the November 1990 DMRD 962 report. Previously, the Deputy Secretary of Defense asked the ASD(FM&P), in conjunction with the Service Secretaries, to study the possibilities of consolidation of UHPT and report back by February 1991. That response was deferred in order to incorporate the DoD's Audit Report on the *Acquisition of Common Aircraft for Navy and Air Force Undergraduate Pilot Training*. Subsequent to the DoD's report, the ASD(FM&P) led a study to evaluate the two DMRD 962 proposals related to DoD helicopter pilot training: elimination of fixed-wing training requirement for Navy and Marine Corps helicopter students and consolidation of all DoD UHPT at the Army Aviation Center at Fort Rucker. The study considered three alternatives:

Alternative 1 — (retain fixed-wing training for UHPT selection and *collocate* at Fort Rucker): continue current programs that provide fixed-wing training for all Navy pilot candidates but move Navy rotary-wing UHPT to Fort Rucker as an independent Navy-managed program; close one naval aviation training base.

Alternative 2 -- (eliminate fixed-wing training for UHPT selection and *collocate* helicopter training at Fort Rucker): use only rotary-wing aircraft to train undergraduate helicopter pilots and conduct that independent Navy-managed program at Fort Rucker; close one naval aviation training base.

Alternative 3 -- (eliminate fixed-wing training for UHPT selection and *consolidate* at Fort Rucker): use only rotary-wing aircraft to train all DoD undergraduate helicopter pilots in a joint-service UHPT program at Fort Rucker; close one naval aviation training base:

Closing a naval aviation training base was not addressed in DMRD 962 and the DoDIG audit, but this option became paramount in this evaluation because it would provide the largest potential source of recurring annual savings in the analysis. Regardless of which option was selected, the report noted that taking steps immediately that would allow the closing of a naval aviation training base in BRAC '93 was key to achieving near-term savings.²⁹ Additionally, the report considered the results of the DoD's Audit Report on the Acquisition of Common Aircraft for Navy and Air Force Undergraduate Pilot Training and JPATS. The report concluded that significant one-time out year savings were possible from the offset of buying fewer JPATS aircraft and the costs associated with military construction and buying new NTHs. The table below shows the savings and cost data for each alternative.

	<u>Annual</u> <u>Near-term Savings</u>	<u>Annual</u> <u>Outyear Savings</u>	<u>One-time</u> <u>Near-term Costs</u>	<u>One-time</u> <u>Outyear Savings</u>
Alternative 1	8-18	8-18	30-40	O
Alternative 2	6-18	16-30	30-40	304-418
Alternative 3	7-19	17-31	30-40	255-395

ASD(EM&P) Evaluation of DMRD 962 Proposals related to UHPT, December 1992,

(S's in millions).³⁰

The final report recommended a version of Alternative 1 (retain fixed-wing training and collocate at Fort Rucker) and made two recommendations. First, the Secretary of the Navy should consider relocation of the Navy UHPT program to Fort Rucker, with the goal of closing an existing aviation training base in the context of BRAC '93 deliberations.

Second, the Secretary of the Navy should provide a plan to eliminate the practice of using fixed-wing training to select potential helicopter student pilots, to be implemented in conjunction with the JPATS program. All coordinating offices concurred with the study

recommendations except the Navy, which strongly nonconcured. The recommendation represented a minimal impact approach which would meet the BRAC deadline and allowed for further study of Alternatives 2 and 3.

In February 1993 the CJCS released the "Report on the Roles, Missions, and Functions of the Armed Forces." The report was important in identifying areas where the services were inefficient and researched the proper assignment of roles, missions, and functions to each Service to ensure that U.S. forces are the most effective at any given level of resources. The report was an omnibus paper addressing the myriad issues in the DoD. The Secretary of Defense reviewed the CJCS report and made decisions about implementation after drawing upon the following considerations:

- How do the new post-Cold War dangers impact upon the assignment of Service roles and functions? Will the Services need to assume new responsibilities to meet these dangers?
- Do technological challenges and opportunities require changes in the assignment of Service roles and functions?
- Will proposed changes produce significant cost savings?
- Are proposed changes realistically achievable in light of existing organizational arrangements, sunk costs, and political circumstances?

The Secretary of Defense directed that actions subsequent to the CJCS recommendations fell into three categories: 1) move quickly toward implementation, 2) undertake fast-track studies to explore some additional alternatives and to develop detailed proposals for implementation, and 3) accept the CJCS recommendation that, for now, no immediate changes are necessary.

In the list of actions in the first category, the Secretary directed the Service components to move quickly to implement consolidation of attack helicopter maintenance and aircrew training, general support helicopter support maintenance training, simulator

training, and maintenance infrastructure. It is interesting to note that in this same list was the requirement to consolidate fixed-wing undergraduate pilot training for Navy and Air Force students. The proposal to consolidate Army and Navy/USMC UHPT fell in the second category regarding fast-track studies. The Secretary of Defense directed that the Secretary of the Navy, assisted by the Secretary of the Army, prepare follow-on studies to explore alternatives and develop proposals for implementation of UHPT consolidation. The CJCS report did not address the issue of eliminating fixed-wing training for helicopter pilots.

In response to the Secretary of Defense directive, in 1993 the Secretary of the Navy, assisted by the Secretary of the Army, conducted another study to explore alternatives and develop proposals for consolidation of UHPT. Due to the complexities of the issue and political sensitivities, no attempt was made to factor into the options the effects of a base closure from the BRAC process. The study concluded early on to eliminate all collocation options at Fort Rucker as too costly and focus in detail on consolidation options. Additionally, provided that UHPT was consolidated, the Services agreed to a "common core" curriculum followed by "Service unique" training in order to meet the service specific requirements. It was also determined that the Army had the training capacity to accommodate all DoD UHPT at Fort Rucker after completion of some necessary military construction projects.³¹ The study examined five departures from a baseline involving full Navy JPATS procurement with helicopter pilot training being retained in its current state at Whiting Field. Every option included fixed-wing training for helicopter pilots and was based on a twenty-year period. Each option compared the cost of training at Whiting Field (in either the TH-57, the T-34C, or JPATS) to the cost of consolidated training at Fort Rucker in the NTH. The five options were:

Option 1 -- PRE-JPATS with T-34C; Navy/USMC
students would continue to be trained in the T-34C for primary and

intermediate training before receiving helicopter training at Whiting Field or going to Fort Rucker for consolidated UHPT.

Option 2-- POST-JPATS w/o T-34C; Navy/USMC
students would receive primary fixed-wing training in the JPATS before receiving helicopter training at Whiting or going to Fort Rucker for consolidated UHPT.

Option 3 -- POST-JPATS with T-34C; this option is that same as Option 1 except that students selected as jet or propeller student pilots would receive follow on training in JPATS.

Option 4-- POST-JPATS with T-34C as CLASSIFIER;
this option offers a variation of Option 3, in which the T-34C is used to classify all students (jet/prop/hello) before they enter Primary Flight Training. Students that are identified as helicopter pilots proceed to Primary Training in the T-34C followed by helicopter training at Whiting or consolidated UHPT at Fort Rucker.

Option 5 -- NO FIXED-WING TRAINING; this option is "no fixed-wing training" for helicopter pilots and incorporates an administrative method of selecting students for jet/prop/hello training. Students identified as jet/prop proceed to JPATS training and helicopter student pilots conduct helicopter training at Whiting or at consolidated UHPT at Fort Rucker. The T-34C would be retired from the inventory. (Although the Navy called this a "no fixed-wing training" option, the Navy stated in the study that the helicopter student pilots would still require fixed-wing training and that following rotary-wing instruction they would be trained in JPATS for another 60 hours. So, although labeled as such, this option is by no means a "no fixed-wing training option.")

The study used some assumptions and estimates in the analysis. Since the Army NTH had not been delivered and operating costs were not available, the Navy used the operating cost of the similar TH-57 which was \$324 per hour. Additionally, since the source selection had not taken place for the JPATS, the Navy used an average procurement cost for the competing aircraft of \$4.2 million dollars and an average operating cost of \$420 per hour.

The Navy-led analysis revealed that Option 1 (status quo) was the least expensive method of conducting helicopter training: Pre-JPATS with T-34C. Consequently, the report recommended that the Services remain the status quo until JPATS was fielded.

<u>Option</u>	<u>Location</u>	<u>Costs</u>
1	Whiting	\$791.60
1	Fort Rucker	\$922.90
2	Whiting	\$1,253.60
2	Fort Rucker	\$1,354.50
3	Whiting	\$877.10
3	Fort Rucker	\$986.10
4	Whiting	\$968.28
4	Fort Rucker	\$1,099.58
5	Whiting	\$1,259.80
5	Fort Rucker	\$1,325.60

Department of the Navy, Initial Findings on the Consolidation of Army and Navy Initial Helicopter Training and Continued use of Fixed-wing Primary to Train and Classify Students Selected for Helicopter Training (\$ in millions), July 1993.

In the latest proposal in response to the "Roles, Functions, and Missions Study", the Army submitted an aggressive proposal to become the DoD lead in rotary-wing operations to the independent Commission on Roles and Missions. Specifically, the Army has proposed that it assume DoD lead for the following rotary-wing operations:

- all rotary-wing flight training
- research and development, acquisition
- doctrine (except tactics, techniques, and procedures for some service unique missions)
- depot maintenance
- air traffic control operator training
- enlisted training.³²

The Army proposal indicated that the Army has developed, procured, and fielded more helicopters than any other service in the world and that they have trained more helicopter pilots than any other service. The Army provided facts to strengthen its proposal by pointing out that the Army owns 79% of the DoD rotary-wing fleet while the Navy/USMC owns 18% and the Air Force 3%.

The proposal reported that Army depots were operating at 80% capacity and that the depots could accommodate the entire DoD fleet depot level maintenance requirements. In the air traffic control area, the Army cited a recent ITRO report that said Fort Rucker has the existing infrastructure to conduct all Army, Air Force, and Navy/USMC air traffic control operator training. In regard to UHPT the Army supported consolidation over collocation.³³ (Collocation, in contrast to consolidation, involves relocating all training assets from one installation to another. This includes personnel, equipment, and administrative infrastructure. Consolidation results in both services integrating with the other which requires less relocation of assets and should provide a dividend of substantial savings in long term recurring cost for DoD.)

IV. NAVY/USMC UHPT CURRICULUM

In order to understand the complexities and the reason for opposition or indecision to the UHPT consolidation issue, one must understand the processes of each UHPT program. Analysis will show the similarities and differences in the two programs.

The Navy conducts its undergraduate helicopter training at Whiting Field in the Pensacola, Florida, training complex. The syllabus consists of part fixed-wing and part rotary-wing training. All Navy and Marine Corps students are commissioned officers. The program consists of 55 weeks of flight and classroom training, after which graduates are awarded their wings (with standard instrument ticket). Upon graduation, the new

Navy and Marine Corps pilots proceed to Fleet Readiness Squadrons (FRS) for additional training prior to assignment to operational units.

	Preflight	Primary	Intermediate	Advanced	Wings	FRS
	6 Weeks	22 Weeks T-34C (JPATS)	5 Weeks T-34C (JPATS)	22 Weeks TH-57		
Flight Hours		66.4	+ 26.0	+ 116.0	=	208.4
Simulator Hours		20.8	+ 10.4	+ 36.4	=	67.6
Total		87.2	+ 36.4	+ 152.4	=	276.0

Navy UHPT Program.

After a six-week preflight course at Naval Air Station Pensacola, the Navy moves its pilot training students to Whiting Field (75%) and Corpus Christi, Texas (25%), for a 22-week primary fixed-wing program in the T-34C turbo-prop fixed-wing trainer aircraft. At the end of the primary phase, students are selected for further training in either jet, propeller, or helicopter aircraft. As a basis for aircraft assignment, in order of importance, the Navy considers the needs of the Navy/USMC at the time (the Pilot Training Requirement), the performance of the student in the primary phase of training, and student's assignment preference.³⁴ Typically, those students selected for helicopter training are in the lower portion of their class, although some students with high grades may select helicopter training as a matter of personal choice. Students selected for rotary-wing training complete a five-week intermediate phase of UHPT in the T-34C and then shift to the TH-57 helicopter trainer aircraft for the final 22-week advanced phase of UHPT. At the end of the 22-week advanced phase of training the students are awarded their wings.

V. ARMY UHPT CURRICULUM

The Army conducts all of its UHPT at the Army Aviation Center at Fort Rucker, Alabama. While the Navy UHPT trains only commissioned officers the Army UHPT students are approximately half officers and half warrant officers. Prior to attending UHPT, the warrant officers earn a provisional commission, which becomes permanent upon successful completion of the program. The Army curriculum consists of from 38 to 42 weeks of rotary-wing and classroom training, after which graduates are awarded their wings (with standard instrument ticket).

	Preflight	Primary	Track	Wings
	2 Weeks	20 Weeks NTH (TH-67)	16-20 Weeks	
Flight Hours	80	+	80	= 1 60.0
Simulator Hours	30	+	1.5	= 31.5
Total	110	+	81.5	= 191.5

Army UHPT Program.

Students in the Army UHPT have two weeks of preflight training before they begin primary training. Primary is conducted in the NTH and continues through instrument training. Upon completion of instrument training, students track either in the UH-1 or the OH-58. Beginning in FY 97, all students will go through the OH-58 track except U.S. Army Medical Service Corps, Air Force, and foreign military student pilots. These student pilots will track UH-1. Upon completion of the track training, students are awarded their wings. Upon graduation some Army pilots may receive advanced aircraft qualifications (AH-64, OH-58D, CH-47D) while the rest are assigned directly to

operational units. The Army conducts their advanced aircraft qualifications at Fort Rucker.

VI. CURRENT STATUS of JPATS and NTH

Acquisition of the Joint Primary Aircraft Training System (JPATS) is a Navy and Air Force project. The JPATS is designed to replace the Navy's T-34C and the Air Force's T-37 aircraft and is likely to be used until 2025. The 1992 DoDIG Audit Report on *Acquisition of Common Aircraft for Navy and Air Force Undergraduate Pilot Training* called for the acquisition of 888 aircraft at an expected cost of \$4.44 billion or \$5 million per airframe. Recently, the Raytheon Company won the bid to build the new JPATS. The actual number of aircraft to be delivered will be 711 at a total cost of \$7 billion or \$9.8 million per airframe. The aircraft is called the MkII and is a single engine propeller plane based on a Swiss design. However, the project is currently on hold awaiting a GAO ruling on an appeal from one of the losing bidders that claimed that the Raytheon MkII does not meet the requirement to be user-friendly for small-framed, light-weight female student pilots.³⁵

The Army NTH (TH-67) is a Bell Jet Ranger that has been modified to meet U.S. Army training requirements. The initial requirement for UHPT was 157 airframes. However, due to the reduction in Army pilot training requirements, the total number of airframes required to train all students was reduced to 137. As of February 1996, all 137 airframes were delivered to Fort Rucker. The basis training aircraft costs \$771,000 and the instrument trainer costs \$860,000.

VII. ISSUES and RESOLUTIONS

The Army is in favor of consolidation of UHPT at the Army Aviation Center at Fort Rucker. The Navy/USMC opposes closing their UHPT operation at Whiting Field and consolidating at Fort Rucker. Within this context, along with the amount of independent studies that have been in favor of consolidation, I will address the arguments that the Navy/USMC have against consolidation. I have compiled the major disputes and questions that the Navy has with regard to consolidation of UHPT. Some of the issues are new and some have remained since the proposal surfaced in 1965. In all cases I have attempted to address the issues and questions with the latest information available.

The primary hurdle that has prevented the consolidation of UHPT programs is the Navy *requirement to conduct fixed-wing training*. In order to consolidate UHPT, that is conduct *all* UHPT at Fort Rucker, the Navy would have to eliminate fixed-wing training for helicopter pilots to maximize cost-effectiveness (the 1991 ITRO report considered continuing the Navy initial fixed-wing training and then sending the selected helicopter students to a consolidated program at Fort Rucker, but this was considered not cost-effective). The Navy position is that fixed-wing training is essential and is cost effective. However, as will be addressed later in this study, the T-34C and/or the JPATS is not the least expensive method of conducting training.

Another problem with eliminating fixed-wing primary for all students is that the Navy and USMC use student performance in fixed-wing initial training to choose pilots for jet, propeller, or helicopter aircraft. If the fixed-wing portion of the Navy program were eliminated, then the Navy and USMC would lose their method of distinguishing future jet, propeller, and helicopter pilots. This is a legitimate problem, but it is not insurmountable. The Navy would have to identify future fixed-wing pilots from rotary-wing pilots using some other method. An option could be a combination of aviation

selection test battery scores and performance in a simulated environment. The Navy currently administers a battery of aptitude tests. The scores are combined into two ratings: the Flight Aptitude Rating (FAR) and the Officer Aptitude Rating (OAR).³⁶ The two ratings are widely used in the Naval community to measure intellectual ability for academics and special flight related abilities. These scores combined with a series of hands-on examinations in an aircraft simulator could prove effective in identifying potential fixed-wing and rotor-wing pilots. The fixed-wing simulators are already in place and should not require any modification or expense.

Navy officials stated that if fixed-wing primary for all pilots were eliminated and some other method were used to track pilots either fixed-wing or rotary-wing that the attrition rate in the fixed-wing course would rise. That could be true. However, the Navy/USMC adjusts the standards for acceptance into jet and propeller training depending on the needs of the service at the time. If the service needs more fixed-wing pilots then more students are allowed to select fixed-wing training. Instead of only the top performers in a particular class going fixed-wing, others may be accepted as required to fill the service needs. So, the Navy position, given that a battery of aptitude tests and simulator rides were used to select helicopter pilots would cause the fixed-wing course attrition rate to rise significantly, is not convincing.

Navy officials stated that in 1990 the Air Force was dissatisfied with the Army's method of training helicopter pilots and intended to require fixed-wing training for its helicopter pilots. That is true, however, in 1991, the Air Force Chief of Staff reversed the decision because this requirement was too costly; the training would cost the Air Force an additional \$15 million for the fixed-wing training of up to 50 students per year.

The Navy position was that the T-34C fixed-wing training aircraft provided the least expensive method of teaching instruments. This argument was true when one compared the T-34C to the Navy TH-57 or to the Army UH-1. However, the T-34C is

more expensive to operate than the NTH. However, if the Navy keeps fixed-wing training in the syllabus, then the options are to continue to use T-34C's or more likely to use JPATS. So, the comparison of operating cost must be between the Army NTH and the Navy T-34C and JPATS. The table below indicates that cost saving, in terms of operating hours, is possible and that the current and future Navy method of teaching instruments is not the least expensive.

	<u>Army NTH</u>	<u>Navy T-34C</u>	<u>Navy JPATS</u>
Operating Cost	\$189	\$227	\$435

**Training aircraft cost comparison (\$ per hour),
(JPATS estimated).**

The Navy noted that it would be necessary to add instrument flight hours to the helicopter curriculum if fixed-wing training were eliminated. That may be true, but the effects are not dramatic because the current curriculum for the T-34C and the TH-57 helicopter have many redundant instrument training events.³⁷ In the area of instrument training, the DoDIG Audit Report clearly pointed out that the Army and Air Force UHPT program was more efficient in qualifying their helicopter students for Federal Aviation Agency instrumentation certification.³⁸

The Navy expressed concern about career opportunities for helicopter pilots that are also fixed-wing rated. Specifically, they claimed that elimination of fixed-wing training would reduce the availability of T-34C fixed-wing flight instructor pilots (they were typically helicopter pilots). That is true, but the requirement for T-34C instructor pilots would be reduced if fixed-wing training for helicopter pilots was eliminated.

The Navy also claimed that USMC helicopter pilots were often required to transition from helicopter to fixed-wing aircraft during their careers. The 1992 DoDIG Audit Report team researched this potential problem and discovered that in 1991 the

Marine Corps had approximately 4,700 qualified fixed-wing and rotary-wing pilots on active duty. Marine Corps personnel records showed that only 56 aviators (1.2 percent of the 4,700 active aviators) officially transitioned from helicopter to fixed-wing operational aircraft during their military careers.³⁹ Also, when the team queried the Naval Military Personnel Command, they were informed that Navy pilot transition numbers were even less than the Marine Corps.

Another concern from the Navy/USMC perspective is the training for future V-22 Osprey student pilots. The V-22 is a tiltrotor, vertical/short takeoff and landing (VSTOL) aircraft designed to replace the aging CH-46E and CH-53D helicopters presently operating in support of the Navy and Marine Corps. The V-22's thirty-eight foot rotor system and engine/transmission nacelle mounted on each wing tip allow it to operate as a helicopter for takeoff and landing. Once airborne, the nacelles rotate forward 90 degrees, converting the V-22 into a high-speed, high-altitude, fuel-efficient turboprop airplane. The V-22 is still in the engineering and mechanical development phase but in December 1994 the Secretary of Defense announced the decision to replace the CH-46 Sea Knight with the V-22.⁴⁰

The Marine Corps is studying the proper method of training V-22 pilots. Considerations such as whether the V-22 is an airplane that has helicopter capabilities or a helicopter with airplane capabilities will impact the method of pilot training. The Navy/USMC must determine if the pilots will train essentially as fixed-wing pilots that receive a helicopter familiarization or if they will be trained as helicopter pilots that receive a fixed-wing familiarization. The impact of UHPT consolidation could effect V-22 pilot training but exactly how is still undefined.

Another major question that must be resolved to determine if UHPT consolidation is cost effective is the capacity of the facilities at the Army Aviation Center at Fort Rucker to accommodate the Navy/USMC. The total post acreage of Fort Rucker is 63,602, of

which 57,772 is the reservation, and 2,095 is leased, and 3,735 is owned outside the main reservation. The post has one fully instrumented airfield, four basefields, 17 stagefields, one testing site, and 133 tactical training sites. The installation has 4000 square miles of primary training area and the 133 tactical training sites are located throughout the 32,000 square miles of the local flying area. Reduced useage of the existing facilities at Fort Rucker has created an excess training capacity that the Navy has conceded can easily accommodate the entire DoD training load.⁴¹

However, Fort Rucker would have to conduct some minor military construction. The Army would have to add to the existing navigation system by adding navigation aids that the Navy uses more than the Army such as Tactical Air Navigation (TACAN) and Instrument Landing System (ILS). In addition to the new navigation aid requirement, the Navy has stated that they would want to move their six TH-57 simulators to Fort Rucker and to accommodate the simulators Fort Rucker would have to build a new building. The Navy stated that they would want one of the existing stagefields to be completely renovated including the hangers, shops, fire station, administrative rooms, classrooms, and hot refueling pads. All together the military construction costs amounted to over \$16 million.⁴²

While previously many disagreements existed, as mentioned earlier, in the 1993 study the services worked together and agreed to a syllabus provided that UHPT was consolidated. Sufficient commonality exists between the two existing UHPT programs around which to form a consolidated core syllabus. The syllabus would start with a Joint primary core flight training module which would teach basic helicopter maneuvers (takeoff, hovering, landing, straight and level flight, climbs and descents, etc.), and radio navigation procedures and airway navigation. Upon completion of the Joint primary core module, students would move into Service tracks that satisfy Service unique training requirements.⁴³

The Navy has expressed the view that if training were consolidated at Fort Rucker that Navy/USMC students would not be able to satisfy the requirement to get shipboard landing qualified. The Navy uses the Helicopter Landing Trainer barge near Whiting to conduct shipboard landing qualifications. I believe this to be an easily fixed problem. First, the barge is only a one hour flight away from Fort Rucker. So, in the event that it was not acceptable to build a similar training device at Fort Rucker, students could fly to the barge in conjunction with a cross-country training flight to conduct the training.

VIII. CONCLUSION

History has shown that the greatest hurdle that prevented the consolidation of UHPT has been Congress. The House and the Senate never were able to agree. Lobbying by retired high ranking military officers frequently persuaded congressional votes against consolidation. Congress has been the final roadblock that has prevented consolidated UHPT even when the Services put aside their parochial issues and agreed to consolidation.

But today our politicians are trying to "reinvent government." The end of the Cold War has enabled us to inwardly reflect on our capabilities, our capacities, and our national will. The government has identified areas that are inefficient and has targeted them for overhaul or divestiture. Accordingly, the Armed Forces have been scrutinized in this way for the benefit of all American taxpayers. While painful to military members and civilian employees, and sometimes devastating to local communities, the BRAC process has realigned and closed hundreds of installations in an effort to conduct better governmental business. Likewise, within the DoD, we have reviewed the way we operate to identify potential greater efficiencies and to create a more orderly military. The Bottom Up Review and CORM identified redundancies within the Services and have sought to make

corrections. Most importantly, the effort has been in support of the larger governmental goal of designing and building a more efficient government for our children to inherit.

As a result of the recent effort to create greater efficiencies in government, the proposal to consolidate UHPT has resurfaced due to the Report on the Roles, Missions, and Functions of the Armed Forces. When reviewing the roles and missions of each Service, it was apparent that operating two UHPT programs was redundant and the potential for significant saving in governmental expenditures existed. However, as pointed out, the concept is not new or novel; consolidated UHPT has been proposed for the last thirty-one years.

The concept of consolidation has made sense for thirty-one years. First, common sense tells us that when training is combined or consolidated, it should cost less through the use of common training equipment, facilities, management organizations, and maintenance. To support what our intuition tells us, the clear majority of the independent studies have suggested that consolidation of UHPT would cost the DoD less while maintaining the quality of the graduate pilots.

When closely reviewing the latest, and possibly the most thorough study of consolidated UHPT, the Navy-led 1993 study, it is apparent that many of the estimates that it used were not close to the actual figures today. The most prominent are the estimated operating cost of the NTH (it was estimated to be \$324/hour compared to the actual operating cost of \$189/hour)⁴⁴ and the procurement cost of JPATS (it was estimated to be \$4.3 million/aircraft compared to the actual cost of over \$9.8 million/aircraft). One estimate is double and the other is half of the actual figures. The findings of the study would have revealed that consolidation at Fort Rucker was the best option if the actual operating costs and procurement costs had been available.

The main goal was, and still is, to save money and avoid future costs as it relates to future helicopter pilot training in the DoD, and in that light, we have missed a *major*

opportunity to do so. In the last couple of years, the potential for savings peaked in regard to the UHPT consolidation issue. I base this conclusion on two factors: BRAC and JPATS. The potential combined saving from closing a training base and the reduction of the JPATS buy clearly tipped the scales in favor of consolidating UHPT.

The closure of an additional flight training base would have provided a substantial savings to the American public. BRAC considerations provided the largest source of *recurring* annual savings and according to the December 1992 ASD(FM&P) report *Coordination On An Evaluation of Defense Management Report Decision 962 Proposals Related To Undergraduate Helicopter Pilot Training*, the savings were estimated to be \$10-20 million per year. While the one time costs to close a base was estimated to be \$18-20 million, even the worst case scenario indicated that closing a Navy aviation training base would pay for itself in less than three years.⁴⁵ Another significant benefit of the BRAC process was that it would have made funds derived from base closures available to pay the costs associated with closing or relocating activities from those bases. However, in regard to consolidation of UHPT, the DoD missed the time-limited window for the BRAC 1993 and 1995 opportunities.

The biggest surprise to me in the research of UHPT consolidation was where the most significant potential savings existed: JPATS acquisition. The JPATS aircraft planned to support fixed-wing training for undergraduate helicopter pilots represent, by far, the single largest cost consideration in the proposal to consolidate UHPT.

Before I address the lost savings opportunity regarding JPATS acquisition, it must be pointed out that the JPATS buy is directly linked to the most controversial aspect of UHPT consolidation: the Navy requirement to conduct fixed-wing training for helicopter student pilots. The Army has stated that it takes no position on whether the Navy should or should not use initial fixed-wing training for their helicopter pilots.⁴⁶ In my opinion, fixed-wing training is not required for helicopter pilots and probably does not, in itself,

provide the benefits regarding airsense that the Navy claims. I believe that helicopter pilots can learn and achieve the required skill and airsense from flying helicopters and helicopters alone. Additionally, a majority of the Navy/USMC helicopter pilots that I have talked to said that they could have probably performed just as well without the benefit of fixed-wing training. Almost all the reports regarding fixed-wing training for helicopter pilots say that it is not cost-effective or efficient use of training time. Furthermore, the fact that less than two percent of Navy and USMC helicopter pilots transition to fixed-wing operational aircraft also supports the discontinuance of fixed-wing training for helicopter student pilots. Although difficult to substantiate, I believe that the Navy effort to keep fixed-wing training for helicopter pilots is based more on tradition and emotion than on any other factor.

Regardless of opinion or report findings about fixed-wing training, when Raytheon recently won the \$7 billion contract to build 711 of the new trainer airplanes (JPATS) for the Air Force and the Navy, the possibility of great saving in American tax dollars and the likelihood of a future consolidated UHPT were drastically reduced. The Navy scored a strategic victory in its effort to prevent UHPT consolidation because the decision on JPATS virtually assures the postponement of consolidation in the near future. Studies have shown, with the introduction of the Army's NTH, that the most significant cost savings resultant from consolidating UHPT programs would require the elimination of fixed-wing training. While the JPATS is intended to replace the T-34C training airplane, the Navy officials have stated that based on current utilization rates and a shift in the Fatigue Life Expended (FLE) airframe management, the T-34C fleet could last into year 2020 even without a Service Life Extension Program (SLEP). Without a FLE but with a SLEP, the Navy has stated that the T-34C fleet could last well beyond 2020.⁴⁷ This raises questions as to the reason for the JPATS buy in the first place (question beyond the scope of this paper).

In 1992 the JPATS buy was expected to be 764 aircraft for the Air Force and the Navy. Of the 347 Navy JPATS, an estimated 100 were supposed to support fixed-wing training related to the UHPT program. The ASD(FM&P) report calculated that if fixed-wing training was eliminated from the Navy UHPT syllabus, the cost avoidance by buying fewer JPATS would be substantial. Specifically, the estimated cost at the time for one JPATS was \$3.5-4.3 million. So, reducing the JPATS purchase by 100 airframes was supposed to result in a savings of \$350-430 million dollars. However, today the actual contract for JPATS is 711 aircraft of which 339 are for the Navy (8 less than projected in 1992). More significant however is the per airframe actual contract cost: over \$9.8 million dollars each (\$7 billion dollars for 711 aircraft). If the actual buy were reduced by the same percentage as in the 1992 proposal, then the government could have reduced the JPATS buy by 97 airframes. Thus, had the Navy agreed to eliminating fixed-wing training for helicopter pilots, the savings to the American tax payer would have been approximately \$955 million or nearly a *billion dollars*.

Fortunately, the JPATS contract is not unchangeable; procurement programs frequently change in regard to initial versus final demands. In my opinion, the potential savings and the numerous studies opposed to fixed-wing training justify the modification of the JPATS contract, discontinuance of fixed-wing training for Navy/USMC helicopter student pilots, and consolidation of UHPT at Fort Rucker.

IX. IT CAN'T BE STOPPED

The time was right to consolidate UHPT during the BRAC process resulting in an aviation training base realignment, simultaneously causing a reduction in the \$7 billion JPATS purchase. Those significant potential achievements combined with the push to reinvent government and reduce spending made the timing right to consolidate UHPT.

The numbers reveal that we would have saved the American tax payer close to a billion dollars in the short term and millions of dollars annually thereafter.

Although the Navy's adoption of JPATS will postpone the question of consolidation for a while, the bulk of the evidence sustains the case for UHPT consolidation at Fort Rucker. I believe that it is inevitable that consolidation will occur in the future. I base my projection on three factors: we are not finished reinventing government; we are not finished downsizing our military; and finally, the requirement to conduct joint operations will continue to increase.

First, in this year of presidential election, politicians argue over the federal budget deficit and the rate at which it should be reduced. After all deliberations, the bottom line is that government spending will have to be reduced to achieve the goal. As part of our government, the DoD will continue to be affected by these political efforts.

Secondly, while it is not clear yet how far the DoD will be reduced to meet our National objectives, it is clear that the Army is planning on reducing its entire helicopter inventory. In 1991 the Army had approximately 8000 rotary-wing aircraft of various types. The Army is reducing the types of aircraft and the total number in the rotary aircraft fleet. It currently has ten different types of helicopters but it plans on reducing that to four or five operational type aircraft (does not include training and Special Operations aircraft). Also, the Army's goal is to reduce its total rotary aircraft inventory to less than 5000 aircraft by 2015.⁴⁸ This reduction represents nearly a forty percent reduction in the fleet. Consequently, the Army will have a smaller pilot training requirement, which in turn will result in even greater excess training capacity at Fort Rucker. The inefficiency of operating two separate UHPT programs will become more apparent than ever since consolidation of UHPT was first conceptualized.

Finally, the other factor that will cause the consolidation of the UHPT programs is the ever increasing requirement to fight jointly. Consolidation will ensure that junior

officers from all Services train together and learn Service unique employment principles and tactics, techniques, and procedures. By learning each others roles and requirements at an early stage in career development, the dividends will be significant when the officers advance into the leadership positions of their Services and plan and execute Joint operations.

NOTES

¹ Department of Defense Inspector General Audit Report, *Acquisition of Common Aircraft for Navy and Air Force Undergraduate Pilot Training* (Washington , DC: GPO, March 1992), 32.

² United States Army Aviation Center, *Roles and Missions Brief* (Fort Rucker, AL, 1995), 7.

³ Office of the Deputy Chief of Staff for Operations, USA, *Memorandum For Commission of Roles and Missions* (Washington, DC, February 1995), 1.

⁴ *ibid*, 1.

⁵ The GAO conducted its first investigation on the UHPT consolidation proposal in 1965.

⁶ Department of Defense Inspector General Audit Report, *Acquisition of Common Aircraft for Navy and Air Force Undergraduate Pilot Training* (Washington , DC: GPO, March 1992), 31.

⁷ *ibid*, 31.

⁸ U.S. Congress, House, Committee on Appropriations. Subcommittee on the Department of Defense, *Consolidation of Undergraduate Helicopter Pilot Training*, 95th Cong., 1st sess., 1970, 39-40.

⁹ U.S. Congress, House, Committee on Appropriations. Subcommittee on the Department of Defense, *Consolidation of Undergraduate Helicopter Pilot Training*, 95th Cong., 1st sess., 24 March 1977, 56.

¹⁰ U.S. Congress, House, Committee on Appropriations. Subcommittee on the Department of Defense, *Consolidation of Undergraduate Helicopter Pilot Training*, 95th Cong., 2nd sess., 9 February 1976, 123.

¹¹ Department of Defense Inspector General Audit Report, *Acquisition of Common Aircraft for Navy and Air Force Undergraduate Pilot Training* (Washington, DC: GPO, March 1992), 97.

¹² R. A. Berube, *Combining Service Undergraduate Helicopter Pilot Training*, U.S. Army War College, Carlisle Barracks, PA, March 1993, 6.

¹³ U.S. Congress, House, Committee on Appropriations. Subcommittee on the

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¹⁴ U.S. Congress, House, Committee on Appropriations. Subcommittee on the Department of Defense, *Consolidation of Undergraduate Helicopter Pilot Training*, 95th Cong., 1st sess., March 1977, 435.

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

ASD(FM&P)	Assistant Secretary of Defense for Force Management and Personnel
BRAC	Base Realignment and Closure
CJCS	Chairman, Joint Chiefs of Staff
CORM	Commission on Roles and Missions
DMRD	Defense Management Report Decision
DoD	Department of Defense
DoDIG	Department of Defense Inspector General
FAR	Flight Aptitude Rating
FLE	Fatigue Life Expended
FRS	Fleet Replacement Squadron
GAO	Government Accounting Office
IERW	Initial Entry Rotor-Wing
ITRO	Interservice Training Review Organization
JPATS	Joint Primary Aircraft Training System
NTH	New Training Helicopter
OAR	Officer Aptitude Rating
OSD	Office of the Secretary of Defense
SLEP	Service Life Extension Program
UHPT	Undergraduate Helicopter Pilot Training
USA	United States Army
USAF	United States Air Force
USMC	United States Marine Corps
USN	United States Navy
VSTOL	Vertical Short Takeoff and Landing

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